

ART. II.—*Description of two New Species of Marsupials
from Central Australia.*

(With Plate II.)

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In the Report on the Mammalia of the Horn Expedition to Central Australia the following was appended as a foot-note to the list of mammals therein enumerated. "In addition to those named in this list, there certainly exist in Central Australia a species of *Dasyurus* and at least one of *Perameles*. Mr. Gillen informs me that at Alice Springs the blacks have a special corroboree associated with the 'Chilperta' or native cat. *Perameles fasciatus* is included in Sanger's list, and Mr. Byrne of Charlotte Waters, who is well acquainted with the Marsupial fauna of that district, tells me that he knows of the existence of one species of *Perameles* and believes that a species of *Peragale* occurs of considerably smaller size than and distinct from *P. lagotis*."

Since this was written I have received through the kindness of Mr. Gillen of Alice Springs and Mr. Byrne of Charlotte Waters four species of Marsupials, which more than corroborate the statement referred to.

From Alice Springs specimens of *Perameles obesula* and of *Dasyurus geoffroyi* have come. An incomplete skin of what is presumably the same species as the latter has also been secured by Mr. Bryne from Crown Point on the Finke River, so that evidently the species has a wide range in the centre.

The occurrence of *Perameles obesula* is of interest as it serves to considerably extend its distribution, which now stretches right across the whole of West and South Australia, Victoria, New South Wales, probably Southern Queensland and southwards to Tasmania. It is also of interest as being one of the very few species of animals belonging to any group which is possessed in common by Central Australia and Tasmania. The native name of the animal which has so far only been obtained in the Burt

Plains to the north of Alice Springs is "quirra:" Mr. Besley of Alice Springs states that it is plentiful in the neighbourhood of Tennant's Creek, which lies well within the tropics.

In addition to these two forms I have received from Messrs. Gillen and Byrne specimens of a new species of *Perameles*, and from Mr. Byrne specimen of a new species of *Peragale*, and I have once more to thank these gentlemen for their continued exertions, which have resulted in adding considerably, now as on previous occasions, to our knowledge of the Central Australian fauna.

The following is a description of the two new species:—

(1) *Peragale minor*. (Figs. 1, 2, 3, 4).

Size considerably smaller than *P. lagotis*. Fur very long, soft and silky; composed almost entirely of under-fur. General colour fawn-grey but darker than in *P. lagotis*.

Head long, muzzle narrow. Rhinarium naked at the tip of the snout but no backward prolongation of the naked part as in *P. lagotis*.

Face grey-brown, the under-fur on the face grey basally, then fawn coloured with a dark tip, the longer hairs with a longer black tip.

On the dorsal surface and sides of the body the under-fur is black basally, then fawn coloured. The longer hairs very little longer than the under-fur, with a black tip. The hairs of the under-fur very often have a dark brown tip.

Chin and inner side of fore-limbs white, the rest of the limbs and under surface grey, the fur with a dark grey basal part and white distal half.

Hands white. Hind feet white above, hairy beneath, the hairs on the posterior two-thirds black, the anterior third white.

Tail with the proximal two-thirds short haired. Along the dorsal line is a sharply marked narrow band of dark hair increasing in length distally. At one-third of the length from the posterior end the black hairs stop abruptly and are succeeded by a dorsal series of white hairs forming a distinct crest, the hairs of which are proportionately shorter than in *P. lagotis*. Sides and under surface of tail with scanty stiff white hairs.

Two small round pads at the base of the fourth and fifth toes.

A few long whisker-like hairs on the posterior side of the fore-limb, just above the wrist, the longest measuring about 40 mm.

Mammæ, 8. Two or three young ones apparently produced at one time.

DIMENSIONS.

—	(a)	(b)	(c)	(d)	(e)
	Adult ♀ in al.	Adult ♀ in al.	Adult ♂ in al.	Adult ♀ in al.	Adult ♂ in al.
Head and Body -	215	200	245	240	270
Tail - - -	124	118	127	152	160
Hind Leg - -	58.5	57	65	62	73
Ear - - -	71	68	87	85	92
Muzzle to Eye -	31.5	31	37	39	41

Specimen (a) has two young ones in the pouch. Specimen (b) has the hinder pair of mammæ very small. Specimen (d) has three young ones in the pouch. The posterior mamma on the right side is wanting. The anterior pair are small. The second pair has an embryo attached on each side. The third mamma on the right side is small, that on the left has an embryo attached. The fourth on the right side is not developed, and that on the left side is small.

Skull (Plate II., Figs. 1 and 2). Much smaller and more delicate than in *P. lagotis*. The upper anterior end of the Premaxillary only slightly directed forwards, not so strongly marked as in *P. lagotis*, and in consequence the tip of the muzzle seen from the side is not so markedly trifid as in *P. lagotis*. Nasals long and narrow, their greatest breadth going between $4\frac{1}{2}$ to $4\frac{3}{4}$ times into their length. Interorbital region flat and not conspicuously constricted:* relatively much broader than in *P. lagotis*. Lachrymals much as in *P. lagotis* with a distinct ridge marking off the facial from the orbital surface.

* In the specimen of which the dimensions are given the intertemporal breadth (11 mm.) is exactly the same as in a skull of *Peragale lagotis*, the basal length of which is 90 mm.

There is a deep concavity between the two limbs forming the anterior forked end of the malar; the part of the zygomatic process of the maxilla in contact with the lower limb of the fork is produced into a distinct bluntly rounded process (Fig. 2).

Paroccipital process inconspicuous, forming a smooth rounded downgrowth fitting on to but not projecting beyond the hinder wall of the swollen mastoid portion of the auditory bulia.

Bullæ, both alisphenoid and mastoid portions, relatively more inflated with their surfaces smoother than in *P. lagotis*.

Anterior palatine foramen extending nearly as far back as the canine. Posterior palatine foramina extending from p^3 to m^3 ; divided by a narrow long septum. Large but irregular vacuities behind.*

Teeth. I^5 separated from i^1 by a diastema of 1.5 mm. and from the canine by a diastema of 3 mm. Canine long and strong, its distance from p^1 , 4.5 mm. Premolars as in *P. lagotis*. Molars differing from those of *P. lagotis* in not being rounded in section, their summit with cusps much like though not so prominent as those in *Peraneles* and in this respect resembling those of *P. leucura*. Lower canine slightly longer than the premolars. P^1 slightly longer longitudinally than p^4 , p^3 decidedly longer than either of them. Molars distinctly cuspidate.

SKULL DIMENSIONS (σ).

				Mm.
Basal length	..	...	...	66
Greatest breadth	...	...	...	34
Nasals length	...	...	...	32
Nasals greatest breadth	...	...	...	6.5
Intertemporal breadth	...	...	...	11
Palate length	...	...	..	41
Palate breadth outside m^3	...	...	...	17.5
Palate breadth inside m^3	...	...	...	10.5
Palatal foramen	...	...	...	7
Basi-cranial axis	...	..	...	20
Basi-facial axis	...	...	...	46
Facial index	...	...	...	230

* In the specimen figured there is a single vacuity on the right side only between the anterior and posterior foramina—see Fig. 2.

Teeth.	Distance from front of canine to		
	back of m ⁴ ...	... ..	28
„	Horizontal length p ³ ...	... ..	3
„	Horizontal length p ⁴ ...	... ..	3
„	Horizontal length ms ¹⁻³ ...	... ..	12

Type, in the National Museum, Melbourne.

There can I think be little doubt as to the specific distinction of the animal now described. Its smaller size, skull measurements and teeth distinguish it from *P. lagotis*, whilst its colour, skull measurements and the length of molars 1-3 (Fig. 4), serve to distinguish it from *P. leucura*. As yet we have not been able to meet with any further specimens of the latter species, though Mr. Byrne has spared no efforts to secure it.

With regard to the habits of the species now described Mr. Byrne writes, "whilst the 'Urgarta' (*P. lagotis*) occupies the inner end of his burrow the 'Urpila' (*P. minor*) during the winter months lies within a foot or so of the entrance of his and only uses the inner chamber during the summer. This peculiarity is taken advantage of by the natives who jump on the surface of the ground behind the 'Urpila' breaking it in and so cutting off his retreat to the inner chamber. He is thus compelled to rush out through the entrance where a native is waiting to give him his *quietus*. The 'Urgarta' (*P. lagotis*) cannot be captured in this way and has to be dug out. Both species are nocturnal in their habits."

Locality.—Sand-hills about forty miles to the north-east of Charlotte Waters.

(2) *Perameles eremiana*, sp. n. (Figs. 5, 6, 7).

Size medium; proportions slender. Fur soft with numerous long, dark, spiny hairs on the dorsal surface of the head and body; continued as two dark bands down either side of the rump. General colour of upper surface dull orange. Margin of upper jaw and under surface of head together with the whole under surface of the body white. An orange patch on the shoulders. A patch of dark grey under-fur on the outer side of the arm and fore-arm, the rest of the front limb being white. An orange patch on the rump between the two lines of long,

black, spiny hairs where the latter are absent. A patch of grey under-fur on the outer side of the hind-limb at the lower end of the hinder line of long black hairs. Inner side of hind-limb and upper surface of foot white.

Long hairs white at their base, the flattened out part and fine tip being black. Under-fur on the back grey basally with a white median part and an orange extremity. On the sides of the body the grey is wanting, and on the under surface, chin, etc., the orange is also absent.

Muzzle fairly long and slender.

Ears very long, narrow and pointed (Fig. 5), laid forward they reach 17 mm. beyond the anterior canthus of the eye, grey behind, with a brownish patch anteriorly. Metatragus about as broad as long with a rounded end.

A few long, white, whisker-like hairs just above the wrist; the longest measuring 58 mm.

Soles of the hind foot covered with dark brown hairs up to the pads at the base of the fourth or fifth toes.

Tail distinctly bicolour for its whole length. The upper surface with black (or very dark brown) spiny hairs sharply marked off from the white hairs on the under surface and side.

Mammæ, 8. Apparently two young produced at a time.

DIMENSIONS.

	(a) Adult ♂ in al.	(b) Adult ♀ in al.
Head and Body - -	235	275
Tail - - -	118	135
Hind Foot - - -	50.2	55
Muzzle to Eye - -	37	38
Ear - - -	51	51

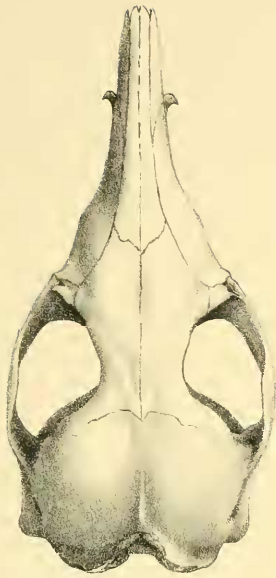


Fig. 1 x 1.

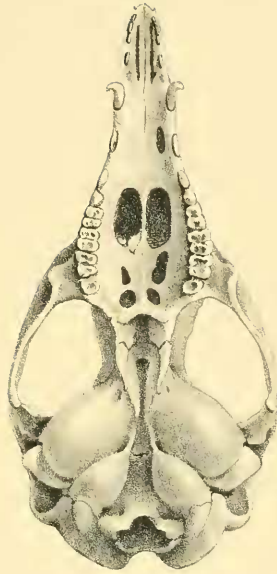


Fig 2 x 1



Fig 7 x 1.



Fig 4 x 3



Fig. 5 x 1



Fig 6 x 1.



Fig 3 x 1

SKULL DIMENSIONS (♀).

				Mm.
Basal length	...	...	...	55·5
Greatest breadth	...	...	...	24
Nasals length	...	...	...	24
Nasals greatest width...	...	...	...	4·2
Intertemporal breadth	...	...	...	12·7
Palate length	...	...	...	3·6
Palate breadth between outer corners of m ⁸	...	...	...	14·5
Palate inside m ⁸	...	...	...	8·2
Palatal foramen	...	...	...	6·5
Basi-cranial axis	...	...	...	15
Basi-facial axis	...	...	...	41
Facial index	...	...	...	273·3
Teeth.	Distance from point of canines to			
	back of m ⁴ ...	...	...	24
„	Length p ⁴ ...	...	...	2·5
„	Length m ¹⁻³ ...	...	...	9·2

Type, in the National Museum, Melbourne.

The native name at Alice Springs is Mulgaruquirra, and at Charlotte Waters is Iwurra.

With regard to its habits Mr. Gillen says “the Mulgaruquirra scoops out a shallow hole on the surface of the ground just sufficiently large to lie in and thatches it with grass; habits nocturnal.”

Mr. Byrne says:—“The Iwurra and Tubaija (*Chacropus castanotis*) are almost identical in their habits, and build similar nests of grass and twigs in shallow oval hollows scooped out in the ground. They are captured in the same way, viz., by placing one foot on the nest, pinning the animal down and then pulling him out with the hand.”

Locality.—Burt Plain north of Alice Springs, and sand-hills about forty miles to the north-east of Charlotte Waters.